

RECEIVED
CENTRAL FAX CENTER

JUN 28 2007

REMARKS/ARGUMENTS

1. In response to the Office Action mailed March 2, 2007, reconsideration of this patent application, in light of the following discussion, is respectfully requested. Claims 1-43 and 80-89 are under consideration. Claims 44-79 and 90-92 are withdrawn.

Applicants are preparing both replacement Figs 1, 3, 4A and 5A and an Information Disclosure Statement for filing with the U.S.P.T.O.

Applicants are currently verifying inventorship in relation to the claim election and will amend the inventorship in accordance with 37 CFR 1.48(b), if necessary.

2-4. Applicants note with appreciation the Examiner's withdrawal of his rejection of claims 27-28, 36, 39-41 and 83 in view of Applicants' arguments filed on December 11, 2006. However, with regard to the Examiner's new grounds for rejection, the rejection of those claims is traversed as set forth herein.

5. Applicants respectfully note that the arguments/remarks of the Response filed on December 11, 2006 pertaining to the Examiner's procedurally defective assertion of inherency relating to the Papamichael References A, B and C, (Building Design Advisor) were only minimally addressed in the present Office Action. Applicants thus respectfully direct the Examiner to the arguments/remarks made in section 10 of this Response in response to the Examiner's citation of the Papamichael references made herein.

6-7. 35 U.S.C §102(e) anticipation rejections (claims 1-7, 13-15, 17-19, 25, 30-34, 42, 82, 84-85 and 89):

Claims 1-7, 13-15, 17-19, 25, 30-34, 42, 82, 84-85 and 89 stand rejected under 35 U.S.C. 35 U.S.C. §102(e) as anticipated by the U.S. Patent No. 6,859,768 to Wakelam et al. (Wakelam). The rejections of the foregoing claims are unwarranted and traversed where at least claims 1 and 33 are patentably distinguishable from Wakelam.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)).

Anticipation will thus not be found where a specific feature of the claimed invention is lacking or missing in the prior art. To serve as an anticipating reference, a prior art reference must not only disclose all of the limitations of the claimed invention, but also be enabled. *E.g., Elan Pharms., Inc. v. Mayo Found. for Med. Educ. & Research*, 68 U.S.P.Q.2d 1373, 1375-76 (Fed. Cir. 2003). Thus, a claimed invention cannot be anticipated by a prior art reference if the allegedly anticipatory disclosures cited as prior art are not enabled.

Exemplary embodiments of the Applicants' computer-implemented method of selecting items for a project within a criteria include the steps of:

- inputting project information, including project criteria;
- determining, with a computer, sets of items based on the project information that meet the criteria;
- calculating for each set of items a set value;
- selecting a set of items based on the calculated set values; and
- displaying to a user the selected set of items that meet the project criteria.

Exemplary embodiments of the Applicants' system for selecting a set of items that meet a given criteria include the components of:

- a central computer having a processor and an input device for receiving information on a project;
- at least one database having a list of items that may be used in constructing the project and a first value for each of the items;
- code for determining sets of items that may be used in constructing the project;
- code for calculating a total first values for each set of items;
- code for selecting a set of items based on the calculated total first values; and
- code for displaying to a user the selected set of items.

Wakelam, teaching a computer-implemented automated building design and modeling system, fails to teach or suggest each and every element of at least the foregoing independent claims 1 and 33. For example, with regard to claim 1, nowhere does Wakelam teach or suggest at least the claim limitations of selecting a set of items based on the calculated set values or displaying to a user the selected set of items that meet the project criteria. With regard to claim 33, nowhere does Wakelam teach or suggest at least the claim limitations of code for selecting a set of items based on the calculated total first values or code for displaying to a user the selected set of items.

With regard to the limitations of claims 1 and 33 calling for selecting a set of items based on the calculated set values and code for selecting a set of items based on the calculated total first values, respectively, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 17, lines 35-68; col. 18, lines 1-49; col. 19, lines 1-37; and fig. 3, elements 302 and 308. However, the Applicants again respectfully disagree.

With regard to column 17, lines 35-68, Wakelam recites, as part of a "reinforcement bar" system, that "once the building configuration is determined, the steel reinforcement . . . system will be automatically designed . . . [with] live load requirements . . . sent to the Structural massing element" (Col. 17, lines 35-41). However, the end result of the system is not a *selection* of a set of items base on calculated set or total first values, as respectively called for by the claims, but instead a *determination* of "the member size and reinforcing steel size, spacing, configuration and location" of the steel reinforcement system of the building model. (See col. 17, lines 48-50.) This end result, an example of which is recited within the Office Action with emphasis in relation to claim 1 (i.e., ". . . the DMES system 110 would design a [sic] end span beam with the following attributes: width 2'6"; depth 20 3/4" . . . [etc.]"), at best, represents a *calculation of loads and a determination of size, spacing, etc.* - not a *selection of a set of items*, as called for by the claims. (See *Id.*, lines 42-45 and 48-50).

With regard to column 18, lines 1-49, the first two paragraphs of this cited portion of Wakelam recite that the system is capable of detecting physical clashes between various components of the building model, with an automatic re-design of the model used to relocate the affected components. However, these first two paragraphs do not teach or suggest selecting a set of items based on the calculated set values or code for selecting a set of items based on the calculated total first values, as called for by the claims. Instead, the paragraphs recite that the system merely "cross-checks" the location and extent of "instances" (col. 18, lines 13-15) or "compare[s] the position" of components (*Id.*, lines 26-28).

With regard to the remaining paragraphs of col. 18, lines 1-49, and with regard to col. 19, lines 1-37, Wakelam recites a process entitled "rattling the box" wherein multiple building configurations are input into the system and varied incrementally to assemble the resultant building models in sequence. Although these cited paragraphs recite that the process incrementally changes a selected parameter (i.e., building angle) and displays a graphical representation of cost estimate data generated in relation to each of the resultant building models to enable comparisons to be made therebetween, the paragraphs do not teach or

suggest that such a display is arrived at via selecting a set of items based on the calculated set values or code for selecting a set of items based on the calculated total first values, as called for by the claims. In contradistinction, the system of Wakelam merely displays information (i.e., overall building cost, fig. 6b) relating to each overall building design (i.e., "... with respect to each of the resultant building models ...") resulting from the incrementally changed parameter (i.e., building angle, fig. 6b) - not information relating to a selected set of items of the building itself. (See, col. 18, lines 44-47 and col. 19, lines 11-21).

With regard to cited fig. 3, elements 302 and 308 (and the supporting written specification of col. 14, lines 16-56), although Wakelam recites that the system produces a variety of project scenarios and cost estimates, which are submitted to the client for review and subsequently subjected to building code interpretation refinement scenarios, the cited figure and supporting written description again do not teach or suggest selecting a set of items based on the calculated set values or code for selecting a set of items based on the calculated total first values, as called for by the claims. In contradistinction, the project scenarios and cost estimates of the system of Wakelam again represent overall building designs (i.e., "... a variety of building models ..."), not selected sets of items of the building itself. (See, col. 14, lines 29-33).

With further regard to claim 33, the Office Action also states that col. 3, lines 12-46; col. 4, lines 38-59; col. 5, lines 1-15 and 41-68; col. 14, lines 15-55; and figs. 6a-6b disclose the claim's "code for selecting" limitation. However, the Applicants again respectfully disagree. Applicants initially note that the Office Action's citations to cols. 3, 4, 5 and 14 as disclosing the "code for selecting" limitations of claim 33 are also cited therein as disclosing the "determining" and "calculating" limitations of both claims 1 and 33 as well. The Examiner is thus invited to explain how or why the cited portions of Wakelam disclose the "determining" and "calculating" limitations of claims 1 and 33 in addition to the distinct "selecting" limitation.

With regard to col. 3, lines 12-46, although this cited portion of Wakelam recites two ways of running the system in relation to the massing elements, further reciting that the quantities of components and materials used and the number of man-hours involved are calculated and priced for output as a graphical estimate sheet or data file, this cited portion does not teach or suggest code for *selecting a set of items based on the calculated total first values*, as called for by the claim.

Nor does col. 4, lines 38-59 (summarizing the capability of the system to detect clashes between building model components of col. 18, discussed herein, *supra*); col. 5, lines 1-15

(summarizing the reinforcement bar system design process of col. 17, discussed herein, *supra*) and 41-68 (reciting advantages of the system relating to clash detection, the automatic assembly of objects, the generation of design drawings and documents from the automatically assembled building model, and the input of multiple design configurations via incremental steps by which they are to vary for the assembly of resultant building models); col. 14, lines 15-55 (outlining the DMES process); fig. 6a (illustrating a flowchart for the "rattling the box" process of cols. 18-19, discussed herein, *supra*) or fig. 6b (illustrating the output display for the "rattling the box" process of cols. 18-19, discussed herein, *supra*) teach or suggest code for selecting a set of items based on the calculated total first values, as called for by the claim.

Applicants submit that if Wakelam does not teach or suggest selecting a set of items based on the calculated set values or code for selecting a set of items based on the calculated total first values, as called for respectively by claims 1 and 33, then it also does not teach or suggest the further limitation of those claims calling for a display or code for the display of that selected set of items. Thus, the display of figure 6b of Wakelam does not display a selected set of items [based on the calculated set or total first values, respectively], but instead displays, at best, an overall end result (i.e., total building cost) at each iteration of a changed parameter (i.e., building angle). (See discussion herein, *supra*, of cols. 18-19 relating to the "rattling the box").

In view of the foregoing, because at least claims 1 and 33 are patentably distinguishable from Wakelam, a withdrawal of the rejection those claims is respectfully requested. Claims 2-7, 13-15, 17-19, 25, 30-32, 82 and 84-85 directly or indirectly depend from claim 1 and include all of the features of that claim, plus additional features, while claims 34, 42, 83 and 89 directly or indirectly depend from claim 33 and include all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth for claims 1 and 33, it is submitted that claims 2-7, 13-15, 17-19, 25, 30-32, 34, 42, 82, 84-85 and 89 patentably distinguish over Wakelam as well. A withdrawal of the rejection of these claims is thus respectfully requested.

Further regarding claim 2, the Office Action states that the limitations are disclosed by Wakelam at the following locations: abstract; col. 11, lines 1-60; col. 3, lines 34-46; col. 8, lines 17-37 and 46-68; col. 9, lines 8-15; col. 12, lines 12-24; and fig. 1, elements 118, 122, 123, and 124. However, the Applicants again respectfully disagree.

With regard to the abstract, although Wakelam recites that the "DMES system provides a central source for all of the design and construction information for a construction project in a

coordinated two-dimensional and three-dimensional spatial database," It does not teach or suggest items stored in at least one database with each item having an associated first item value and second item value. Similarly, with regard to col. 11, lines 1-60, although Wakelam recites a "database 118," it does not teach or suggest that such a database includes each item having an associated first item value and second item value as called for by the claim. Also, while col. 11, lines 1-60 of Wakelam recites "a first element" that receives design data from the interview massing element 201, it is not taught or suggested that such design data includes associated first and second item values, as called for by the claim. (See col. 11, lines 29-31).

Nor does cited col. 3, lines 34-46 (reciting the placement of each element by the massing element); col. 8, lines 17-37 and 46-68 (again reciting database 118, elements and massing elements); col. 9, lines 8-15 (reciting a database containing cost information to be associated with an itemized cost code); col. 12, lines 12-24 (reciting elements and the output thereof); or fig. 1, elements 118, 122, 123 and 124 (illustrating the OOPBM, DMES, cost estimating and scheduling systems, respectively) teach or suggest items stored in at least one database with each item having an associated first item value and second item value, as called for by the claim. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 3, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 3, lines 34-46; col. 4, lines 1-9 and 60-68; col. 5, lines 1-15 and 68 [sic] -68; col. 9, lines 40-45; col. 14, lines 16-55; and fig. 3. However, the Applicants again respectfully disagree.

With regard to col. 3, lines 34-46, although Wakelam recites the placement of each element by the massing element and the calculation of component quantities and man-hours, it does not teach or suggest that such calculated quantities are a first project value for the project based on project information and the criteria, or that sets of items are determined that are in compliance with the calculated first project value. Nor does the portion of the citation quoted within the Office Action (col. 12, lines 11-15) teach or suggest these limitations. Per the quoted portion, the system of Wakelam merely assembles *a complete building model* constrained by defined parameters instead of *calculating a first project value* based on the project and criteria and determining *sets of items in compliance with the calculated first project value*.

Nor does cited col. 4, lines 1-9 (generally summarizing the DMES system) and 60-68

(generally summarizing the reinforcement bar system design capabilities of the DMES system); col. 5, lines 1-15 (further summarizing the reinforcement bar system design process) and 68[sic]-68 (reciting advantages of the system relating to clash detection, the automatic assembly of objects, the generation of design drawings and documents from the automatically assembled building model, and the input of multiple design configurations via incremental steps by which they are to vary for the assembly of resultant building models); col. 9, lines 40-45 (enabling assignment of activity names to elements); col. 14, lines 16-55 (outlining the DMES process producing a variety of building models); and fig. 3 (flowchart for producing project scenarios and cost estimates representing overall building designs) teach or suggest the step of calculating a first project value for the project based on project information and the criteria, and the step of determining sets of items that are in compliance with the calculated first project value. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 4, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 4, lines 37-59; col. 5, lines 1-15 and 42-68; col. 13, lines 5-33; col. 14, lines 13-55; col. 18, lines 34-68; col. 19, lines 1-46; appendix A; and figs. 3 and 6a. However, the Applicants again respectfully disagree.

With regard to col. 14, lines 13-55, although Wakelam recites that the DMES system utilizes a feedback loop to produce a variety of building models and associated project scenarios to include cost estimates and construction schedules that are submitted to the client for code and other review, the end result of the system is nonetheless a variety of overall building models. Thus, as recited in the quoted portion within the Office Action, the iteration (i.e., feedback loop) of the system of Wakelam merely assembles a variety of overall building models and related construction documentation *for each building model* (see col. 14, lines 37-42). It does not teach or suggest iterating through combinations of first item values of (i.e., of the building) and determining sets of items that are in compliance with the calculated first project value based on the iterated combinations.

Nor does col. 4, lines 37-59 (reciting the capability of the system to detect clashes between building model components); col. 5, lines 1-15 (summarizing the reinforcement bar system design process) and 42-68 (reciting advantages of the system relating to clash detection, the automatic assembly of objects, the generation of design drawings and documents from the automatically assembled overall building model, and the input of multiple design configurations

via incremental steps by which they are to vary for the assembly of resultant building models); col. 13, lines 5-33 (calculating quantities and cost and introducing the "rattle the box" feature assembling overall buildings through varied parameters); col. 18, lines 34-68 and col. 19, lines 1-46 (again reciting "rattling the box" wherein multiple building configurations are input into the system and varied incrementally to assemble the overall building models in sequence); appendix A (illustrating a code segment for the "rattling the box" process of producing multiple overall building models); and figs. 3 (illustrating, in view of the supporting written specification of col. 14, lines 16-56 that the system of Wakelam produces a variety of building models and associated project scenarios and cost estimates, with construction documentation produced for each building model) and 6a (illustrating a flowchart for the "rattling the box" process of col. 19, discussed herein) teach or suggest the step of iterating through combinations of first item values and determining sets of items in compliance with the calculated first project value based on the iterated combinations. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 5, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 4, lines 37-59; col. 5, lines 1-15 and 42-68; col. 13, lines 5-33; col. 14, lines 13-55; col. 18, lines 34-68; col. 19, lines 1-46; appendix A; and figs. 3 and 6a. However, the Applicants again respectfully disagree.

With regard to col. 14, lines 13-55, although Wakelam recites that the DMES system utilizes a feedback loop to produce a variety of building models and associated project scenarios to include cost estimates and construction schedules, it does not teach or suggest the step of calculating a second project value wherein the step of iterating begins at a first combination of first item values based on the second project value.

Nor does col. 4, lines 37-59 (reciting the capability of the system to detect clashes between building model components); col. 5, lines 1-15 (summarizing the reinforcement bar system design process) and 42-68 (reciting advantages of the system relating to clash detection, the automatic assembly of objects, the generation of design drawings and documents from the automatically assembled overall building model, and the input of multiple design configurations via incremental steps by which they are to vary for the assembly of resultant building models); col. 13, lines 5-33 (calculating quantities and cost and introducing the "rattle the box" feature assembling overall buildings through varied parameters); col. 18, lines 34-68 and col. 19, lines 1-46 (again reciting "rattling the box" wherein multiple building configurations are input into the

system and varied incrementally to assemble the overall building models in sequence); appendix A (illustrating a code segment for the "rattling the box" process of producing multiple overall building models); and figs. 3 (illustrating, in view of the supporting written specification of col. 14, lines 16-56 that the system of Wakelam produces a variety of building models and associated project scenarios and cost estimates, with construction documentation produced for each building model) and 6a (illustrating a flowchart for the "rattling the box" process of col. 19, discussed herein) teach or suggest the foregoing limitations. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 6, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 9, lines 8-68; fig. 1, elements 118, 122, 123 and 124; and figs. 3 and 6a. However, the Applicants again respectfully disagree.

With regard to col. 9, lines 8-68, although Wakelam recites a database and cost data, it does not teach or suggest that the database further comprises a *table comprising a plurality of second project values and associated combinations of first item values*. Nor do figs. 1, 3 or 6a, each illustrating a flow chart, teach or suggest the foregoing limitations relating to a table. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 7, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 8, lines 16-37; col. 9, lines 1-65; col. 12, lines 11-36; col. 14, lines 15-45 and figs. 2a-2k and 3. However, the Applicants again respectfully disagree.

With regard to col. 9, lines 1-65, although Wakelam recites calculated values, a database and cost data, it does not teach or suggest that such values or data are set values that are a combination of the second item values associated with each set of items. With regard to col. 14, lines 15-45, although Wakelam recites that the system produces a variety of building models and project scenarios utilizing a feedback loop, it does not teach or suggest set values, much less each set value being a combination of the second item values associated with each set of items.

Nor does col. 8, lines 16-37 (again broadly reciting values and a database); col. 12, lines 11-36 (reciting output from the interview estimate element 202a' and further reciting writing activity data to data files); and figs. 2a-2k (illustrating the assembly hierarchy, elements and element functions, respectively) and 3 (flowchart for producing project scenarios and cost estimates representing overall building designs) teach or suggest that each set value is a

combination of the second item values associated with each set of items. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 13, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 9, lines 8-31; col. 12, lines 11-24; col. 14, lines 16-43; col. 19, lines 18-37; fig. 1, element 123 and figs. 1b, 2b-2c, 3 and 6a. However, the Applicants again respectfully disagree.

With regard to col. 9, lines 8-31, although Wakelam recites cost data, it does not teach or suggest that such data comprises each second item value. Nor does col. 12, lines 11-24 (generally reciting that component quantities are priced for output); col. 14, lines 16-43 (broadly reciting overall cost estimates associated with a variety of building models produced by a feedback loop); col. 19, lines 18-37 (reciting incremental variation of building angle in relation to overall building cost); fig. 1, element 123 (cost estimating system) and figs. 1b (interview dialog); 2b-2c (values passed between elements), 3 (flowchart for producing project scenarios and cost estimates representing overall building designs) and 6a (flowchart for "rattling the box" process) teach or suggest that each second item value is an item cost. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 18, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 2, lines 11-36; col. 3, lines 34-46; col. 14, lines 15-43; col. 17, lines 36-68; and figs. 3, 2a-2d and 4a-5f. However, the Applicants again respectfully disagree.

With regard to col. 14, lines 15-43, although Wakelam recites project parameters as "number of floors, total gross area, floor plate area, type of structure and cladding systems," it does not teach or suggest structural information comprising information on basement walls or crawl space walls.

Nor does col. 2, lines 11-36 (reciting objects comprising elements and massing elements); col. 3, lines 34-46 (relating element and massing element); col. 17, lines 36-68 (reciting structural steel members); and figs. 3 (flowchart for producing project scenarios and cost estimates representing overall building designs), 2a-2d (assembly hierarchy and element interviews) and 4a-5f (building layout dialog boxes and building assembly drawings), teach or suggest these items. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 30, the Office Action states that the limitations are disclosed by

Wakelam at the following locations: col. 4, lines 38-59; col. 5, lines 1-15; col. 19, lines 1-37; and fig. 4b. However, the Applicants again respectfully disagree.

With regard to col. 4, lines 38-59, although Wakelam summarizes that the DMES system performs clash detection and a redesign of the building model, it does not teach or suggest that such redesign includes the step of updating second item values. With regard to fig. 4b, although the figure illustrates that data is modified, it does not teach or suggest that the modified data comprises the updating of *second item values*.

Nor does col. 5, lines 1-15 (summarizing the redesign of the building model in relation to the size, spacing, configuration and location of structural steel based on loads); or col. 19, lines 1-37 (again reciting "rattling the box" wherein multiple building configurations are input into the system and varied incrementally to assemble the overall building models in sequence) teach or suggest this step. Applicants note that although col. 9, lines 19-31 recites that "the estimate database 123 is designed such that cost data contained therein may be periodically updated," it again does not teach or suggest that such updated cost data comprise second item values, as called for in the claim. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 31, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 3, lines 47-56; col. 4, lines 38-59; col. 5, lines 1-15; col. 9, lines 20-31; col. 19, lines 1-37; and fig. 4b. However, the Applicants again respectfully disagree.

With regard to col. 9, lines 20-31, quoted within the Office Action, although Wakelam recites the periodic update of cost data via local or remote access and the download of updated cost data to the database, it does not teach or suggest that such updated cost data comprises *updated second item value information*.

Nor does col. 3, lines 47-56 (reciting writing data to data files); col. 4, lines 38-59 (reciting the capability of the system to detect clashes between building model components, and redesign the building model); col. 5, lines 1-15 (summarizing the redesign of the building model in relation to reinforcing steel size, spacing, configuration and location based on loads); col. 19, lines 1-37 (again reciting "rattling the box" wherein multiple building configurations are input into the system and varied incrementally to assemble the overall building models in sequence) or fig. 4b (illustrating modification of data) teach or suggest a document containing updated second item value information. Applicants note that although Wakelam (col. 3, lines 41-46 and col. 12, lines

20-25) recites that "quantities are passed directly to the Interview Estimate element 202a' . . . for output . . . as a graphical estimate sheet in the database 118 . . .,"it does not teach or suggest that the sheet contains updated second item value information or that the sheet is sent to an administrative server computer configured to update the at least one database storing items. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 34, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 3, lines 47-56; col. 4, lines 38-59; col. 5, lines 1-15; col. 9, lines 20-31; col. 19, lines 1-37; and figs. 2b-2c, 4b and 6a-6b. However, the Applicants again respectfully disagree.

With regard to col. 9, lines 20-31, although Wakelam recites the periodic update of cost data and the download of such updated cost data by authorized individuals, it does not teach or suggest that such cost data comprises an item cost of each first value and that each total first value is the sum material cost of a set of items.

Nor does col. 3, lines 47-56 (reciting writing data to data files); col. 4, lines 38-59 (reciting the capability of the system to detect clashes between building model components); col. 5, lines 1-15 (summarizing reinforcing steel size, spacing configuration and location based on loads); col. 19, lines 1-37 (again reciting "rattling the box" wherein multiple building configurations are input into the system and varied incrementally to assemble the overall building models in sequence) or figs 2b-2c (values passed between elements), 4b (illustrating modification of data) or 6a-6b (flowchart for and output of the "rattling the box" process) teach or suggest that each first value is an item cost and that each total first value is the sum material cost of a set of items. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 84, the Office Action states that the limitations are disclosed by Wakelam at the following locations: col. 4, lines 38-59; col. 13, lines 22-33; col.18, lines 34-68; col. 19, lines 1-37; and figs. 6a-6b. However, the Applicants again respectfully disagree.

With regard to col. 4, lines 38-59, although Wakelam recites that the DMES system is capable detecting physical clash detection between various components of the building model, such detection does not involve interactions between items based on their associated first and second item values. At best, it involves interactions based on a single item value (i.e., item position) of the building's components to determine such clashes. See Wakelam, col. 18, lines

25-28 ("... to compare *the position* of the current light fixture against structural columns ..."). With regard to the cited lines of cols. 13, 18 and 19 and to figs. 6a-6b relating to the "rattling the box" process, the system analyzes overall building models based on an incremented value - not interactions between *at least two items based on associated first and second values*. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Further regarding claim 85, the Office Action again states that the limitation are disclosed by Wakelam at the following locations: col. 4, lines 38-59; col. 13, lines 22-33; col. 18, lines 34-68; col. 19, lines 1-37; and figs. 6a-6b. However, the Applicants again respectfully disagree.

With regard to col. 4, lines 38-59, although Wakelam recites that the DMES system is capable detecting physical clash detection between various components of the building model, such detection does not involve interactions between an item and a structural component based on an associated first and second item value. At best, it involves interactions based on a single item value (i.e., item position) of the building's components to determine such clashes. See *Id.* With regard to the cited lines of cols. 13, 18 and 19 and to figs 6a-6b relating to the "rattling the box" process, the analyzes overall building models based on an incremented value - not interactions between *at least one item and a structural component based on associated first and second item values*. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reasons as well.

Although The Examiner has set forth various cited portions of Wakelam as allegedly teaching the claimed invention, Applicants respectfully submit that the remaining, non-cited portions of Wakelam do not teach or suggest at least the foregoing claim limitations as well.

8-9. 35 U.S.C. §103(a) obviousness rejections (claims 8-12, 16, 20-23, 26, 35-38, 43 and 87)

Claims 8-12, 16, 20-23, 26, 35-38, 43 and 87 stand rejected under 35 U.S.C. §103(a) as unpatentable over Wakelam et al. (Wakelam) as applied to claims 1-7, 13-15, 17-19, 25, 30-34, 42, 82, 84-85 and 89 and further in view of MECcheck Software User's Guide Version 3.0, April 2000 (MECcheck).

The rejection of claims 8-12, 16, 20-23, 26, 35-38, 43 and 87 under §103(a) as unpatentable over Wakelam in view of MECcheck is not warranted and is hereby traversed.

Claims 8-12, 16, 20-23, 26 and 87 indirectly depend from claim 1 and include all of the features of that claim, plus additional features, while claims 35-38 and 43 directly or indirectly depend from claim 33 and include all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claims 1 and 33, a withdrawal of the rejection of claims 8-12, 16, 20-23, 26, 35-38, 43 and 87 is respectfully requested as well.

Further regarding claims 8-12, 16, 20-23, 26, 35-38, 43 and 87, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is suggested or motivated by the prior art or in the knowledge available to one of ordinary skill in the art. See M.P.E.P. §§706.02(j) and 2142. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make the proposed modification.

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103 requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II).

Nor would anyone of ordinary skill in the art have any basis for attempting to combine these references. Neither Wakelam nor MECcheck teach or suggest systems that at least select and display sets of items based on calculated values. In contradistinction, Wakelam recites that the DMES system can utilize a feedback loop to produce a variety of building models, calculate the size and spacing of specific building components (i.e., reinforcement steel components), perform clash detection between building components and calculate and display overall building design information (i.e. building cost) resulting from an incrementally changed parameter (i.e., building angle), while MECcheck recites that its system determines and displays whether a given building design, as a whole based on input building component and code information, passes or fails in comparison with a reference "code building," further reciting that the system also displays a "% Better (Worse)" indication of the pass/fail result. See Wakelam: col. 14, lines 15-42; col. 17, lines 36-62; col. 18, lines 3-33; and col. 18, line 33 to col. 20, line 12; see MECcheck: introduction, p. 3, para. 4 ("The trade-off approach calculates whether your home as a whole meets the overall code insulation and window requirements."); software user's guide, p.1, para. 4 ("If the total heat loss . . . of your building does not exceed the total heat loss from the same building conforming to the code, then the software declares that you pass."); software user's guide, p. 4, para. 1 (% better than code); software user's guide, p. 8, para. 2 ("If the total UA of your building is less than or equal to the total UA of the code building, . . . the Compliance filed displays the message 'Passes.'")

Further regarding claims 8 and 35, the Office Action states that "Wakelam et al. teach a computer-implemented method of selecting items for a project within a criteria further comprising determining and displaying the set with the lowest set value . . ." Applicants respectively submit, however, that the fact that Wakelam allegedly teaches *determining and displaying the set with the lowest set value* adds no support to the Examiner's assertion that Wakelam in view of MECcheck renders claims 8 and 35 obvious because neither claims 8 and 35, nor claims 1-2 and 33-34, from which they respectively depend, recite "determining and displaying the set with the lowest set value." Nor does Wakelam teach selecting sets of items (see sections 6-7, herein, *supra*).

Nor does MECcheck, alone or in combination, teach or suggest the limitations of claims 8 and 35. Instead of teaching or suggesting selecting a set of items with the lowest set value or code that selects a set of items with the lowest total first value, MECcheck, a system that merely verifies building designs with code requirements on a "pass/fail" basis, merely recites the

following: pp. 1, 4-5 (MECcheck introduction, to include brief discussion of trade-off approach, which calculates whether building design as a whole meets overall code requirements); Appendix D, tradeoff worksheet guide, pp. 1-3 (merely illustrating an energy label and take-off worksheet); software compliance example, pp. 27-30 (discussing building components and compliance results). Thus, nowhere do the foregoing cited portions, of any other portion of MECcheck, alone or in combination, teach or suggest the limitations of claims 8 and 35. Thus, because these claims are patentably distinguishable from the prior art, a withdrawal of the rejection of these claims is respectfully requested for the foregoing reason as well.

Further regarding claim 9, the Office Action states that "Wakelam does not expressly teach selecting items with the lowest total [sic] value as claimed. (Office Action in support of the rejection of claims 8 and 35, p. 25, para. 1). Applicants respectfully submit that if Wakelam does not teach or suggest selecting a set of items with the lowest set value, as called for by claim 8, then it also does not teach or suggest the further limitation of claim 9 calling for a display of the set of items with the lowest set value. Thus, with regard to the cited lines of cols. 18, 19 and 20 and to figs. 6a-6b relating to the "rattling the box" process, Wakelam does not display a selected set of items with the lowest set value, but instead displays, at best, an overall lowest end result (i.e., lowest total building cost) at a given iteration of a changed parameter (i.e., building angle). Because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claims is respectfully requested for the foregoing reason as well.

Further regarding claim 11, Applicants note that the Office Action cites to Appendix B, Pages 1-2 of MECcheck in support of the following statement : "MECcheck further teaches representing glazing area values as decimals and fractions . . . the mathematical equivalent of percentages . . ." However, Applicants note that Appendix B is comprised of only one page, and that the decimals recited therein (i.e., 0.38 and 0.34) represent U-factors (i.e., a measure of heat conductance) - not glazing area values.

Further regarding claim 21, although the Office Action states that MECcheck teaches that the [inputted] project information comprises upgrade information and calculating [a first] project value further comprises increasing the project value based on the upgrade information and re-determining sets of items that are in compliance with the increased first project value, the Applicants respectfully disagree. In contradistinction, MECcheck merely determines and displays whether a given building design, as a whole based on input building component and code information, passes or fails in comparison with a reference "code building," further reciting

that the system also displays a "% Better (Worse)" indication of the pass/fail result - it does not re-determine selected sets of items in compliance with an increased project value, as called for by the claim. See MECcheck: introduction, p. 3, para. 4 ("The trade-off approach calculates whether your home as a whole meets the overall code insulation and window requirements."); software user's guide, p.1, para. 4 ("If the total heat loss . . . of your building does not exceed the total heat loss from the same building conforming to the code, then the software declares that you pass."); software user's guide, p. 4, para. 1 (% better than code); software user's guide, p. 8, para. 2 ("If the total UA of your building is less than or equal to the total UA of the code building, . . . the Compliance filed displays the message 'Passes.'").

Nor does MECcheck, Introduction, "What Buildings Must Comply (merely reciting the application of code to various buildings); appendix A, additions, pp. 1-2 (defining an addition as an increase in habitable floor area); or definitions, p. 1 (merely defining additions and alterations) teach or suggest re-determining selected sets of items in compliance with an increased project value. At best, MECcheck recites that a user can "alter any or all . . . inputs to determine if a revised design still complies with the code." (MECcheck: software user's guide, p. 27, para. 3).

However, the above-recited statement does not teach or suggest that the user's determination regarding the revised design is a re-determination of sets of items that are in compliance with an increased first project value. Furthermore, MECcheck recites that determination regarding the revised design is performed by a user while the steps of claim 21, read in combination with parent claims 3 and 1, require that the steps be performed by a computer. Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reason as well.

Further regarding claim 36, although the Office Action states that MECcheck teaches [code] for determining sets of insulation, the Applicants respectfully disagree. As recited in MECcheck, insulation R values are input into the system (MECcheck: Software Overview, pp. 9-13) and used to calculate an overall UA value for the building that is compared with that of a "code building" to determine whether or not the building UA value complies with that of the reference code building (MECcheck: Software Overview, p. 1, para. 4 and p. 8, para. 2). Whether or not the Insulation (i.e. R values) used in calculating the overall UA actually comply with the building UA value (as measured against the code building UA value) is determined by the user (MECcheck: Software Overview, p. 1, para. 3) after reading the result of the comparison with the code building - not by the computer (i.e., code to determine) as called for by the claims.

Nor does MECcheck, introduction, pp. 1, 4-5 (reciting that a building should meet/exceed code requirements, and broadly reciting compliance approach regarding insulation, respectively); software overview, pp. 1, 3-4 and 22 (reciting that the user compares insulation to arrive at what works best, reciting UA compliance and % better/worse, and HVAC efficiency, respectively); p. 8, para. 2 (reciting pass/fail compliance in relation to code building); compliance examples, pp. 27-30 (enter/alter inputs to determine overall building code compliance) teach or suggest code to determine sets of insulation. Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reason as well.

Further regarding claim 37, although the Office Action states that MECcheck teaches "code to calculate at least one glazing area . . . and to determine sets of items by first determining the items that are associated with the calculated glazing area, the Applicants respectfully disagree. Applicants note that the Office Action cites to Appendix B, Pages 1-2 of MECcheck in support of the following statement: "MECcheck further teaches representing glazing area values as decimals and fractions . . . the mathematical equivalent of percentages . . ." Applicants note, however, that Appendix B is comprised of only one page, and that the decimals recited therein (i.e., 0.38 and 0.34) represent U-factors (i.e., a measure of heat conductance) - not glazing area values.

Furthermore, because the Office Action recites that MECcheck does not expressly teach that the glazing area is represented as a percentage (Office Action, p. 42, para. 2), it thus follows that MECcheck does not include *code to calculate* the glazing percentage, as called for by the claim. The Office Action appears to make the argument that, because MECcheck teaches code to calculate at least one *glazing area*, it would be obvious (via official notice) to modify MECcheck to calculate a glazing areas percentage instead. However, MECcheck recites that glazing areas are *input* into the system by the user and not calculated by the system itself. See MECcheck, software user's guide, p. 15, gross area ("Enter the area of the entire window component in square feet.")). Because modifying MECcheck to input glazing percentages instead of glazing areas would change MECcheck's principle of operation, the teaching of the references are not sufficient to render the claims *prima facie* obvious. See M.P.E.P. §2143.01(V.).

Also, MECcheck does not determine sets of items, much less those associated with glazing areas, because MECcheck merely determines and displays whether a given building

design, as a whole based on input building component and code information, passes or fails in comparison with a reference "code building," further reciting that the system also displays a "% Better (Worse)" indication of the pass/fail result. See MECcheck: introduction, p. 3, para. 4 ("The trade-off approach calculates whether your home as a whole meets the overall code insulation and window requirements."); software user's guide, p. 1, para. 4 ("If the total heat loss . . . of your building does not exceed the total heat loss from the same building conforming to the code, then the software declares that you pass."); software user's guide, p. 4, para. 1 (% better than code); software user's guide, p. 8, para. 2 ("If the total UA of your building is less than or equal to the total UA of the code building, . . . the Compliance filed displays the message 'Passes.'"). Nor does MECcheck, software user's guide, p. 3, last paragraph (merely discussing "Your" and "Max." UA calculations and their comparison); appendix B, pp. 1-2 (reciting glazing default U-factors); or definitions, p. 3 (defining glazing area) teach or suggest the limitations of claim 37. Thus, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reasons as well.

Further regarding claim 38, although the Office Action states that Wakelam in view of MECcheck teaches code for evaluating combinations of other items associated with glazing area percentages closest in value to the calculated glazing areas percentage, the Applicants respectfully submit that the Examiner has not established prima facie obviousness. Although the Office Action states that MECcheck teaches "identifying the closeness . . . of the selected project items . . . to the building codes/standards," the claim calls for an evaluation of combinations of items *associated with* a given glazing area percentages that are closest in value to the *calculated glazing area percentage*. Because the Office Action fails to address the claim limitation of evaluating combinations of items *associated with* a given glazing area, there can be no prima facie obviousness of the claim. See M.P.E.P. §2143.03. Thus, a withdrawal of the rejection of this claim is respectfully requested because of the foregoing reasons as well.

10. 35 U.S.C. §103(a) obviousness rejections (claim 24)

Claims 24 stands rejected under 35 U.S.C. §103(a) as unpatentable over Wakelam et al. (Wakelam) and MECcheck as applied to claim 21 and further in view of the "Building Design Advisor (BDA) software product," with the "features, capabilities and/or *characteristics inherent* in the BDA software product being disclosed in" three published articles, namely, Papamichael et al., Building Design Advisor: Automated Integration of Multiple Simulation Tools (1997)

(reference A); Papamichael et al., Product Modeling for Computer-aided Decision Making (1999) (reference B); and Papamichael et al., Application of Information Technologies in Building Design Decisions (1999) (reference C).

The rejection of claim 24 under §103(a) as unpatentable over Wakelam in view of MECheck and further in view of the BDA is not warranted and is hereby traversed. Claim 24 indirectly depends from claim 1 and includes all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claim 1, a withdrawal of the rejection of claim 24 is respectfully requested as well.

Further regarding claim 24, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is taught or suggested by the prior art. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make the proposed modification. See, e.g., M.P.E.P. §706.02(j).

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103 requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II.). Also, Applicants note that the Office Action, in stating the alleged obviousness of claim 24, has failed to recite that Wakelam would have benefited from the teachings of MECcheck. Instead, only reciting that it would have benefited from the teachings of the BDA.

Nor would anyone of ordinary skill in the art have any basis for attempting to combine these references. Neither Wakelam nor MECcheck teach or suggest systems that at least select and display sets of items based on calculated values. In contradistinction, Wakelam recites that the DMES system can utilize a feedback loop to produce a variety of building models, calculate the size and spacing of specific building components (i.e., reinforcement steel components), perform clash detection between building components and calculate and display overall building design information (i.e. building cost) resulting from an incrementally changed parameter (i.e., building angle), while MECcheck recites that its system determines and displays whether a given building design, as a whole based on input building component and code information, passes or fails in comparison with a reference "code building," further reciting that the system also displays a "% Better (Worse)" indication of the pass/fail result. See Wakelam: col. 14, lines 15-42; col. 17, lines 36-62; col. 18, lines 3-33; and col. 18, line 33 to col. 20, line 12; see MECcheck: introduction, p. 3, para. 4 ("The trade-off approach calculates whether your home as a whole meets the overall code insulation and window requirements."); software user's guide, p.1, para. 4 ("If the total heat loss . . . of your building does not exceed the total heat loss from the same building conforming to the code, then the software declares that you pass."); software user's guide, p. 4, para. 1 (% better than code); software user's guide, p. 8, para. 2 ("If the total UA of your building is less than or equal to the total UA of the code building, . . . the Compliance filed displays the message 'Passes.'")

Nor would anyone of ordinary skill in the art have any basis for attempting to combine Wakelam and MECcheck with the BDA references A, B and C where these references teach away from the claimed invention. See M.P.E.P. §2141.02(VI.). In addition to the cited and non-cited portions of references A, B and C failing to teach or suggest that each of the enumerated steps of the claimed method is inherent in the Building Design Advisor, the references, in contradistinction, teach that *the designer, not the BDA*, selects a set of items that satisfy a set of values, which is evidenced as follows:

"The Desktop allows *building designers* to compare multiple design alternatives with respect to multiple descriptive and performance parameters . . ."

(Reference A, p. 1, para. 2)(emphasis added).

"Through its graphical user-interface, the core program allows *users* to . . . review results from computations and data queries in a variety of graphical displays."
(*Id.* at p. 3, para. 3)(emphasis added).

"The main objectives of the GUI design were to allow *building designers* to . . . compare many alternative building designs with respect to many descriptive and performance parameters."
(*Id.* at p. 6, para. 4)(emphasis added).

"The Decision Desktop allows *the user* to compare multiple alternative designs with respect to any number of input and output parameters addressed by the simulation tools linked to the BDA."
(*Id.* at p. 7, caption to fig. 3)(emphasis added).

"Since performance evaluation requires comparison among alternatives [by building designers], we support the evaluation of concurrent design solutions. . . . The Decision Desktop allows multi-criterion decision-making [by building designers], through comparison of multiple alternative design solutions with respect to multiple performance parameters."
(Reference B, p. 5, col. 1, paras. 1-2).

"To satisfy the need for performance evaluation, the BDA supports multiple design alternatives within a project database. . . . The BDA user interface supports the concurrent review and manipulation of any number of alternative design solutions. . . . Moreover, it supports their side-by-side comparison [by users] with respect to multiple performance considerations."
(*Id.* at p. 9, col. 1, para. 1).

Performance prediction is mandatory, but not adequate for decision-making. Once performance has been predicted, it has to be evaluated with respect to its goodness

or appropriateness. Since 'good' or 'bad' makes sense only when there are at least two of a kind, *evaluation requires comparison of multiple alternative design schemes....While performance prediction can be highly automated through the use of computers, performance evaluation cannot*, unless it is with respect to a single criterion. *The multi-criterion nature of most design decisions requires the direct involvement of humans.*

(Reference C, p. 3. col. 1, paras. 2-3)(emphasis added).

The need to also address performance aspects such as comfort, cost, aesthetics, etc., *require a multi-criterion judgment, which cannot be specified and delegated to others, let alone machines. Decision-making is the main non-delegable design task and can only be addressed by the designers themselves.* Moreover, it can only be addressed *through direct, side-by-side comparison of multiple design alternatives.* With the exception of this type of multi-criterion optimization, the rest of the design tasks can be specified and delegated to others, especially computers.....This recognition has been the basis for the development of the BDA software, in an attempt to ... assist decision-makers with the parts of the design process that requires human judgment.

(*Id.* at p. 5, col. 1, paras. 1-2)(emphasis added).

"The Decision Desktop is a matrix that facilitates the comparison [by designers] of multiple design solutions with respect to multiple parameters."

(*Id.* at p. 9, col. 2, para. 2).

"The Decision Desktop allows *designers to compare* multiple design solutions with respect to multiple descriptive and performance characteristics."

(*Id.* at p. 11, fig. 10, caption)(emphasis added).

The references thus teach that the BDA, instead of selecting a set of items that satisfy a set of values or having code that selects the items, merely displays multiple design solutions for comparison *by the designer* in making his/her design choices. Although the Examiner has stated that the claims of the present application do not expressly require a computer to perform

the selecting limitation, Applicants respectfully disagree because claim 1 of the present application expressly recites "A computer-implemented method of selecting items . . . comprising the steps of . . . determining with a computer . . . calculating . . . selecting a set of items based on the calculated set values . . . displaying to the user the selected set of items . . ." while claim 33 expressly recites "A system for selecting a set of items . . . comprising . . . a central computer . . . code for selecting a set of items based on the calculated total first values . . ."

Furthermore, the rejections of the claim 24 is unwarranted and traversed where duplicate pages of the reference makes the Examiner's determination of the publication date of reference B indeterminate such that a proper comparison of the dates of the application and the reference cannot be made in support of obviousness. Applicants note that the pages of Papamichael, K. et al., Product Modeling for Computer-aided Decision Making (1999; Reference B) have been re-numbered by the Examiner to correct the pagination inconsistencies noted by the Applicants in their previous response. However, Applicants note that, in view of the Examiner's revised pagination, Reference B appears to set forth more than a single publication whereas the document includes duplicate pages 2-4, with each set of duplicate pages including respectively different subject matter that allegedly inherently renders obvious the Applicants' claims. In including duplicate pages and possibly setting forth more than a single publication, the Applicants respectfully submit that the Examiner's determination of the publication date(s) of the reference(s) and/or duplicate pages is indeterminate such that a proper date comparison cannot be made between the application and the reference(s) in support of the obviousness rejections of the Applicants' claims. See M.P.E.P. §2141.01(I).

The rejection of the claim 24 is also unwarranted and traversed where no rationale or evidence is provided tending to show inherency. With regard to the Examiner's statements in the Office Action and in support of the rejection of claim 24 relating to the combined use of the multiple Papamichael References A, B, and C as disclosing *inherent* features of the Building Design Advisor software product, the Applicants accept such statements as admissions that the references, taken alone or in combination, do not constitute the Building Design Advisor software product per se, nor do they expressly teach or suggest the Applicants' claimed invention.

With further regard to the Examiner's assertions of inherency, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. M.P.E.P. §2112(IV)(citations omitted). "In relying upon

the theory of inherency, the [E]xaminer must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Id.* In support of his obviousness rejections on the basis of inherency, the Examiner broadly recites to various page and line and/or paragraph numbers of the multiple References A, B and/or C, while occasionally quoting excerpts selections from those references as allegedly disclosing an inherent characteristic taught by the BDA. However, nowhere does Section 10 of the Office Action, as called for by the M.P.E.P., provide a basis in fact and/or any technical reasoning to reasonably support the determination that the allegedly inherent characteristics necessarily flow from the teachings of the applied prior art.

For example, in support of an argument in Section 10 of the Office Action that reference A discloses inherent characteristics relating to Applicants' "selecting" limitation of claim 1, the Office Action recites that the "DVS selects a default exterior wall segment type by first computing the ASHRAE recommended minimal thermal resistance based on degree-days and then selecting a wall type from the library or [sic] walls that best matches the recommended value." (Office Action, p. 50). However, the Examiner has provided no basis in fact and/or technical reasoning to reasonably support his determination that the allegedly inherent characteristic (i.e., selecting a set of items based on the calculated set values) necessarily flows from the teachings of this excerpt, as called for by the M.P.E.P. See M.P.E.P. §2112(IV.) (citations omitted). Such a basis in fact and/or technical reasoning could explain to the Applicants how the DVS, which selects "default values" as *input* to the simulation tools linked to the BDA (see Reference A, p. 12, para. 2), inherently discloses the "selecting" limitation of claim 1, which selects *a set of items based on calculated set values*.

Furthermore, Applicants note that the Examiner cites this same excerpt (i.e., "the DVS excerpt") in support of his argument that reference A discloses inherent characteristics relating to the "determining" limitation of claim 1 as well (Office Action, p. 49). Again, however, the Examiner has provided no basis in fact and/or technical reasoning to reasonably support his determination that the allegedly inherent characteristic necessarily flows from the teachings of this excerpt, nor any explanation of why or how the excerpt discloses inherent characteristics relating to both claim limitations as well (i.e. relating to both the "determining" and "selecting" limitations of claim 1). It is respectfully noted that the lack of any basis in fact or technical reasoning illustrated by the foregoing examples occurs for each rejection recited throughout at

the remainder of at least Section 10 of the Office Action, to include the rejection of claim 24.

The rejection of claim 24 is also improper because the version of the BDA software product recited within the References A, B and C is de facto indeterminate. The Papamichael References A, B and C each discuss present and future "versions" of the Building Design Advisor, with such present and future versions allegedly exhibiting different features or capabilities inherent of the BDA system. (See, e.g., Reference A: p. 1, para.3; p. 4, Fig. 1; pp. 13-14); (See, e.g., Reference B, p. 9, col. 2; p. 12, col. 1, para. 2; p. 13, col. 1, para. 2 to col. 2, para. 1); (See, e.g., Reference C: pp. 13-14; p. 15, col. 1, para. 4). Although the Examiner asserts that the Papamichael References A, B and C disclose features or characteristics inherent in the "BDA software product," the Examiner, has not recited a version number of the product such that the References A, B or C can be unambiguously applied. See 37 CFR §1.104(c)(2); M.P.E.P. §706. Thus, the Examiner has not provided a prima facie determination of whether or not the "software product" is the version having the inherent features or capabilities as allegedly disclosed in the References A, B and C. A withdrawal of the rejection of this claim is thus respectfully requested for this reason as well.

The rejection of claim 24 is also improper because no incorporation by reference of any of References A, B or C is present. Applicants note the Examiner's statements within the Office Action (i.e., p. 5) that Papamichael was a common author of the References A, B and C, that reference A is cited in the bibliography of reference B, that each reference was funded by the California Institute for Energy Efficiency, and that each reference was written at the Lawrence Berkeley National Laboratory in Berkeley, California. If the Examiner sets forth such statements in support of an assertion that one or more of the references A, B or C incorporate one or more of the other references therein (i.e., in an attempt to integrate material from one or more of the references into a host or primary reference), Applicants respectfully submit that such statements do not satisfy the Federal Circuit's requirement that the host reference both identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various other references. *Advanced Display Sys., Inc. v. Kent State Univ.*, 54 U.S.P.Q.2d 1673, 1679 (Fed. Cir. 2000), *cert. denied*, 532 U.S. 904 (2001). A withdrawal of the rejection of this claim is thus respectfully requested for this reason as well.

Further regarding claim 24, assuming, *arguendo*, that the BDA references A, B and C are proper, they nonetheless do not render claim 24 obvious because they do not teach or suggest determining energy consumption based on the selected set of items. For example, with

regard to the cited portions of Reference A, the last paragraph of p. 4 merely discusses performance aspects such as "energy, esthetics, cost, etc." while figure 1 merely illustrates that the "DOE-2 Energy Analysis" application will be linked to a future version of the BDA. Applicants note that although Figure 3 of reference A illustrates total and monthly energy usages, such usages are based on the *total building* and not based on a *selected set of items* as called for by the claims.

Nor do the cited portions of references B and C teach or suggest determining energy consumption based on the selected set of items: Reference B, p. 3 [sic], col. 1, para. 1 (merely mentioning that DOE-2 was developed for energy and energy cost computations); Reference C, p. 13, col. 2, para. 2; (merely reciting that RESEGY computes monthly totals for energy requirements by end use and energy source). Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reason as well.

11. 35 U.S.C §103(a) obviousness rejection (claims 39-41 and 81)

Claims 39-41 and 81 stand rejected under 35 U.S.C §103(a) as unpatentable over Wakelam et al. (Wakelam) in view of MECcheck as applied to claims 3 and 36 and further in view of Bosch, Maria, An Expert System for Cost-Effective Energy Efficiency Calculations (1996).

The rejection of claim 39-41 and 81 under §103(a) as unpatentable over Wakelam in view of MECcheck and further in view of Bosch is not warranted and is hereby traversed. Claim 81 indirectly depends from claim 1 and includes all of the features of that claim, plus additional features, while claim 39-41 indirectly depend from claim 33 and include all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claims 1 and 33, a withdrawal of the rejection of claims 39-41 and 81 is respectfully requested as well.

Further regarding claims 39-41 and 81, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is taught or suggested by the prior art. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the

time of the invention would have been motivated to make the proposed modification. See, e.g., M.P.E.P. §706.02(i).

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103 requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II.).

Nor would anyone of ordinary skill in the art have any basis for attempting to combine these references. Neither Wakelam nor MECcheck teach or suggest systems that at least select and display sets of items based on calculated values. In contradistinction, Wakelam recites that the DMES system can utilize a feedback loop to produce a variety of building models, calculate the size and spacing of specific building components (i.e., reinforcement steel components), perform clash detection between building components and calculate and display overall building design information (i.e. building cost) resulting from an incrementally changed parameter (i.e., building angle), while MECcheck recites that its system determines and displays whether a given building design, as a whole based on input building component and code information, passes or fails in comparison with a reference "code building," further reciting that the system also displays a "% Better (Worse)" indication of the pass/fail result. See Wakelam: col. 14, lines 15-42; col. 17, lines 36-62; col. 18, lines 3-33; and col. 18, line 33 to col. 20, line

12; see MECcheck: introduction, p. 3, para. 4 ("The trade-off approach calculates whether your home as a whole meets the overall code insulation and window requirements."); software user's guide, p.1, para. 4 ("If the total heat loss . . . of your building does not exceed the total heat loss from the same building conforming to the code, then the software declares that you pass."); software user's guide, p. 4, para. 1 (% better than code); software user's guide, p. 8, para. 2 ("If the total UA of your building is less than or equal to the total UA of the code building, . . . the Compliance filed displays the message 'Passes.'")

Nor would anyone of ordinary skill in the art have any basis for attempting to combine Wakelam and MECcheck with the Bosch reference where this reference teaches away from the claimed invention. As acknowledged by the Examiner, Bosch teaches a system "that would help *designers* select the most appropriate and cost-effective combination of materials for their buildings." (*Office Action*, pp. 60 and 63)(*citing Bosch*)(emphasis added). In contradistinction, claim 1 of the present application expressly recites "A computer-implemented method of selecting items . . . comprising the steps of . . . selecting a set of items based on the calculated set values" while claim 33 expressly recites "A system for selecting a set of items . . . comprising . . . code for selecting a set of items based on the calculated total first values." Applicants thus respectfully submit that the cited references teach away from the claimed invention, with such teachings to be considered against a finding to combine or modify them. See M.P.E.P. §2141.02(VI.)(citations omitted).

Further regarding claim 39, although the Office Action states that MECcheck teaches code to decrease the UA value by a certain percentage, the Applicants respectfully disagree. Applicants note that the percentages recited in MECcheck (i.e., % Better (Worse) Than Code Field) represents a *resultant output* of a comparison by MECcheck of two building designs, with such output being the function of various input information. See MECcheck, software user's guide, p. 4, para. 1). The "% Better (Worse)" output of MECcheck is thus not a constraint used by code in decreasing the value of other information. In contradistinction, the "certain percentage" of claim 39 of the present application is utilized by code as a constraint to decrease another piece of information (i.e., the UA value). Nor does MECcheck: introduction, pp. 1, 4-5 (reciting that a building should meet/exceed code requirements, and broadly reciting compliance approach, respectively); software overview, pp. 1, 3 and 22 (reciting UA compliance and % better/worse, and HVAC efficiency, respectively); p. 8, para. 2 (reciting pass/fail compliance in relation to code building); compliance examples, pp. 27-30 (enter/alter inputs to determine

overall building code compliance) teach or suggest the foregoing limitation. At best, MECcheck recites that a user can "alter any or all . . . inputs to determine if a revised design still complies with the code". (MECcheck: software user's guide, p. 27, para. 3).

However, the above-recited statement does not teach or suggest that the user decreases the UA value by a certain percentage. Furthermore, MECcheck recites that determination regarding the revised design is performed by a user while the steps of claim 39 require that the steps be performed by a computer (i.e. code to decrease). Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reason as well.

Further regarding claim 40, although the Office Action states that MECcheck teaches "evaluating the impact of insulation and climate control equipment on a project's performance . . . [etc.]," Applicants note that claim 40 calls for "code to calculate energy consumption information based on the new lowest set of insulation and the climate control information." Because the Office Action fails to recite this limitation of the claim, there is no prima facie obviousness. (See M.P.E.P. 2143.03) Assuming, arguendo that the Office Action recited this limitation as taught by MECcheck, Applicants nonetheless disagree.

With regard to the quoted portion of MECcheck set forth in the Office Action (i.e., "A major focus of the code provisions is on the building envelope insulation and window requirements"), Applicants respectfully submit that the quoted portion does not teach or suggest any calculation of energy consumption, much less such consumption based on a lowest set of insulation and the climate control information. Applicants further respectfully submit that nowhere do the remaining cited or non-cited portions of MECcheck teach or suggest these limitations: p. 4, step 3, compliance process (merely discussing the trade-off approach to determine insulation and window requirements); software overview, pp. 27-30, compliance example (merely setting forth procedural software instructions). Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reason as well.

12. 35 U.S.C. §103(a) obviousness rejections (claims 27-29)

Claims 27-29 stand rejected under 35 U.S.C. §103(a) as unpatentable over Wakelam et al. (Wakelam) as applied to claim 3 and further in view of Khan, U.S. Patent Publication No. 2002/0032611.

The rejection of claims 27-29 under §103(a) as unpatentable over Wakelam in view of Khan is not warranted and is hereby traversed. Claims 27-29 indirectly depend from claim 1 and includes all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claim 1, a withdrawal of the rejection of claims 27-29 is respectfully requested as well.

Further regarding claims 27-29, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is taught or suggested by the prior art. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make the proposed modification. See, e.g., M.P.E.P. §706.02(j).

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103 requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II.).

Further regarding claims 27-29, the Applicants respectfully submit that the Khan publication is insufficient to support any obviousness rejection where it only provides general

guidance regarding the form of the claimed invention or how to achieve it, thus amounting to an improper "obvious to try" suggestion. Applicants note that the Khan publication resulted from a non-provisional application of a related provisional application. As evident from the publication, the non-provisional application included no content beyond that of the provisional application, with such content providing, at best, only general guidance as to the forms and advantages of the invention. In fact, the detailed description of the Khan publication is identical to its summary of the invention, providing not even minimal disclosure in support of any obviousness rejections.

Because the Khan publication, at best, merely provides only general guidance as to the particular form of the claimed invention or how to achieve it, it amounts to an "obvious to try" suggestion that does not render the claims of the present application obvious. *See In re Roemer*, 59 U.S.P.Q.2d 1527, 1531 (Fed. Cir. 2001).

Further regarding claim 27, although the Office Action states that Khan teaches a bill of materials based on a selected set of items for the purposes of providing a "next-generation bill of materials management system that reads live dynamic data from the multiple vendors to make a better more accurate cost effective decision on ordering the parts or filling needed inventory," the Applicants disagree. Because Khan, at best, recites that "a need for" such a system exists (Khan, para. 30) while not providing any solutions to fulfill the need, much less any disclosure that teaches or suggests a bill of materials based on a selected set of items, it again amounts to an "obvious to try" suggestion that does not render the claims of the present application obvious. *Id.*

In contradistinction with the limitation of claim 28 calling for the generation of a bill of materials *based on the selected set of items*, fig. 2 and para. 0045 of Khan illustrates a block diagram showing a "complete disconnect" from *design data* to BOM generation (again with no solutions disclosed therein to remedy the disconnect). Nor do paras. 0022 (merely reciting that the invention relates to the creation and management of a bill of materials); or 0039 (describing fig. 3 as illustrating "a preferred embodiment" of the bill of materials software) teach or suggest the foregoing limitation or a any solution for the "disconnect" of fig. 2. A withdrawal of the rejection of this claim is thus respectfully requested for the foregoing reason as well.

Further regarding claim 29, the improper "obvious to try" suggestion is again evident in the Office Action's assertion of obviousness. While cited paragraph 50 of Khan recites that an "aspect of the present invention relates to representation of all possible vendors and their Inventory . . .," Khan provide no elaboration on this aspect, much less any disclosure that

teaches or suggests displaying information on suppliers based on the bill of materials. Nor do paras. 0022 (merely reciting that the invention relates to the creation and management of a bill of materials); 0028, 0029 & 0030 (reciting present disadvantages and the need for a next generation bill of materials management system); 0039 (describing fig. 3 as illustrating "a preferred embodiment" of the bill of materials software); 0045 & fig. 2 (reciting a "complete disconnect" from design data to BOM generation) teach or suggest the foregoing limitation or provides any elaboration on the foregoing aspect relating to vendors (i.e., suppliers). Thus, a withdrawal of the rejection of these claims is respectfully requested for the foregoing reasons as well.

13. 35 U.S.C. §103(a) obviousness rejection (claim 80)

Claim 80 stands rejected under 35 U.S.C. §103(a) as unpatentable over Wakelam et al. (Wakelam) as applied to claim 2 and further in view of Carroll, William Leslie, Energy and Economic Optimization of Conduction-Dominated Buildings (1986).

The rejection of claim 80 under §103(a) as unpatentable over Wakelam in view of Carroll is not warranted and is hereby traversed. Claim 80 indirectly depends from claim 1 and includes all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claim 1, a withdrawal of the rejection of claim 80 is respectfully requested as well.

Further regarding claims 80, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is taught or suggested by the prior art. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make the proposed modification. See, e.g., M.P.E.P. §706.02(j).

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103

requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II.). Thus, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reasons as well.

14 35 U.S.C. §103(a) obviousness rejection (claim 83)

Claim 83 stands rejected under 35 U.S.C. §103(a) as unpatentable over the Wakelam et al. (Wakelam) in view of MECcheck as applied to claim 34 and further in view of Carroll.

The rejection of claim 83 under §103(a) as unpatentable over Wakelam in view of MECcheck and further in view of Carroll is not warranted and is hereby traversed. Claim 83 indirectly depends from claim 33 and includes all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claim 33, a withdrawal of the rejection of claim 83 is respectfully requested as well.

Further regarding claim 83, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is taught or suggested by the prior art. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make the proposed modification. See, e.g., M.P.E.P. §706.02(j).

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103 requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II.).

Nor would anyone of ordinary skill in the art have any basis for attempting to combine these references. Neither Wakelam nor MECcheck teach or suggest systems that at least select and display sets of items based on calculated values. In contradistinction, Wakelam recites that the DMES system can utilize a feedback loop to produce a variety of building models, calculate the size and spacing of specific building components (i.e., reinforcement steel components), perform clash detection between building components and calculate and display overall building design information (i.e. building cost) resulting from an incrementally changed parameter (i.e., building angle), while MECcheck recites that its system determines and displays whether a given building design, as a whole based on input building component and code information, passes or fails in comparison with a reference "code building," further reciting that the system also displays a "% Better (Worse)" indication of the pass/fail result. See Wakelam: col. 14, lines 15-42; col. 17, lines 36-62; col. 18, lines 3-33; and col. 18, line 33 to col. 20, line 12; see MECcheck: introduction, p. 3, para. 4 ("The trade-off approach calculates whether your home as a whole meets the overall code insulation and window requirements."); software user's

guide, p.1, para. 4 ("If the total heat loss . . . of your building does not exceed the total heat loss from the same building conforming to the code, then the software declares that you pass."); software user's guide, p. 4, para. 1 (% better than code); software user's guide, p. 8, para. 2 ("If the total UA of your building is less than or equal to the total UA of the code building, . . . the Compliance filed displays the message 'Passes.'")

Further regarding claim 83, although the Office Action states that MECcheck teaches "the use of insulation to meet a building code," Applicants note that claim 83 calls for "code to determine sets of insulation . . ." Because the Office Action fails to recite this limitation of the claim, there is no prima facie obviousness. (See M.P.E.P. 2143.03). Assuming, arguendo that the Office Action recited this limitation as taught by MECcheck, Applicants nonetheless disagree. As recited in MECcheck, insulation R values are input into the system (MECcheck: Software Overview, pp. 9-13) and used to calculate an overall UA value for the building that is compared with that of a "code building" to determine whether or not the building UA value complies with that of the reference code building (MECcheck: Software Overview, p. 1, para. 4 and p. 8, para. 2). Whether or not the insulation (i.e. R values) used in MECcheck in calculating the overall UA actually comply with the building UA value (as measured against the code building UA value) is determined by the user (MECcheck: Software Overview, p. 1, para. 3) after reading the result of the comparison with the code building - not by the computer (i.e., code to determine) as called for by the claim. Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully requested for the foregoing reason as well.

15. 35 U.S.C. §103(a) obviousness rejections (claims 86 and 88)

Claims 86 and 88 stand rejected under 35 U.S.C. §103(a) as unpatentable over the Wakelam et al. (Wakelam) as applied to claim 32 and further in view of Pray et al. (Pray), U.S. Patent No. 4,885,694.

The rejection of claims 86 and 88 under §103(a) as unpatentable over Wakelam in view of Pray is not warranted and is hereby traversed. Claims 86 and 88 indirectly depend from claim 1 and include all of the features of that claim, plus additional features. Therefore, for at least the foregoing reasons set forth in support of the withdrawal of the rejection of claim 1, a withdrawal of the rejection of claims 86 and 88 is respectfully requested as well.

Further regarding claims 86 and 88, the fact that prior art can be combined as suggested by the Examiner does not make such combination obvious unless it is taught or suggested by the prior art. Applicants respectfully submit that the Examiner has not cited to any suggestion or motivation in any of the references promoting such a combination, nor has the Examiner provided any reasoning or explanation as to why one of ordinary skill in the art at the time of the invention would have been motivated to make the proposed modification. See, e.g., M.P.E.P. §706.02(j).

Instead, it appears that the Examiner is using impermissible hindsight, or the application itself, to pick and choose among isolated disclosures in the prior art to arrive at the claimed invention. Such is evident where the Office Action repeatedly sets forth separate references to represent each of the different features described in the claims of the present application, and then states that such differences themselves are obvious. In contradistinction, Section 103 requires that the invention be evaluated "as a whole," and not based on an evaluation of the invention part-by-part:

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. . . . The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. Section 103 precludes this hindsight discounting the value of new combinations by requiring assessment of the invention as a whole.

Ruiz v. A.B. Chance Co., 69 U.S.P.Q.2d 1686, 1690 (Fed. Cir. 2004); M.P.E.P. 2141(II.).

Further regarding claim 88, although the Office Action states that Pray teaches charging a fee, Applicants respectfully disagree. The cited written description of Pray recites information relating to billing for project costs: (col. 1, lines 20-22 (job billing processing); col. 3, lines 9-15 (a job billing function wherein a bill form is selected); col. 8, lines 30-35 (billing and sales reports). In contradistinction, the fees charged in the present application are directly and electronically charged through an online transaction. Thus, because this claim is patentably distinguishable from the prior art, a withdrawal of the rejection of this claim is respectfully

requested for the foregoing reason as well.

In conclusion, it is respectfully submitted, that the cited document(s), do not teach or suggest the claimed invention. The accompanying discussion is thus deemed to dispose of all issues in this case and to place this application in a condition for allowance. Early such action is solicited.

The prior art cited but not relied upon has been reviewed with interest. However, this prior art is not deemed to vitiate the patentability of the claimed invention.

Dated: **JUNE 28, 2007**

Respectfully submitted,

By


Attorney for Applicants

Timothy G. Hofmeyer
Registration No. 46,777
303.978.2397
Customer No. 29,602